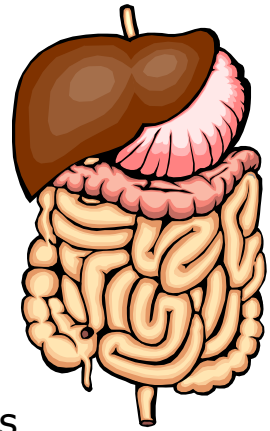


The Human Body: Inside and Out

The BIG Question: What is it about our bodies that make us alive?

What you will be doing: You will be creating an inside drawing and explanation of the human body.

Why are we doing this? We are completing this activity to “open the door” to the complexities of how our bodies work and figure out how we actually stay alive.



In order to do this assignment, you must be able to:



- describe the basic structure and functions of the human respiratory, digestive, circulatory, skeletal, muscular, and nervous systems
- explain how the different body systems are interconnected

How are we going to do this?

The 8 Steps

1. With the assistance of your partner, trace and then cut out the outline of your body.
2. On the second cut-out, draw the inside of your body as accurately as you can. You must include the following details from the respiratory, digestive, circulatory, skeletal, muscular, and nervous systems.

- Respiratory: lung, trachea, mouth, nasal cavity, larynx
- Digestive: tongue, esophagus, liver, stomach, pancreas, large intestine, small intestine, rectum
- Circulatory: heart, vein, artery, capillaries
- Skeletal: Metatarsals, Tibula, Fibula, Femur (left leg), Metacarpals, Humerus, Radius, Ulna (left arm), Cranium, Clavicle, Sternum, Spinal Column, and Ribs (chest).
- Muscular: Right Arm (biceps, triceps, deltoid), Right Leg (sartorius, rectus femoris, gastrocnemius, tibialis anterior)
- Nervous: cranial nerves, spinal nerves

3. Label each system.
4. On a separate piece of paper, under the heading Structure and Function, explain what the structure and function of each system is.
5. On this piece of paper, explain how each system is interconnected with the other systems of the body.
6. Take a deep breath, you are almost done.
7. Proofread your explanations of the Structure and Function as well as the Interconnectedness of each system.
8. Check the grading criteria to ensure that you have completed all of the listed criteria as thoroughly as possible.

Grading Criteria

Name: _____

Illustration 25

- 25 The project is exceptionally well illustrated and visually appealing (colourful) demonstrating significant care and effort.
- 19 The two project is very well illustrated and quite visually appealing demonstrating care and effort.
- 15 The project is quite well illustrated and visually appealing.
- 0-10 More effort is needed.

Accuracy 15

- 15 Drawings of each of the systems are labelled accurately and are approximately the correct size and shape of the systems.
- 10 Some inconsistencies in drawing or labelling.
- 0-8 More attention is required to ensure accuracy.

Description of Structure 20

- 20 Accurate and very detailed explanation of the structure of each of the systems of the human body.
- 15 Accurate and detailed explanation of the structure of each of the systems of the human body. More detail could be added.
- 12 More accuracy may be needed or more explanation of how each system works. May not cover all systems.
- 0-10 More effort is needed.

Description of Function 20

- 20 Thorough explanation of the function of each system providing excellent detail that gives the reader a good understanding of the system
- 15 Somewhat thorough explanation of the function of each system with good use of detail which offers the reader some understanding of each of the systems.
- 12 More detail is required to provide a more informative explanation of the functions of each of the systems of the body.
- 0-10 More effort is needed.

Interconnectedness 20

- 20 An excellent explanation of how each of the systems in the Human Body are connected to each other and work together to keep us alive.
- 16 A good description of how each of the systems of the Human Body are connected to each other and work together to keep us alive.
- 12 More explanation of how the systems of the human body work together is required.
- 0-10 Unsatisfactory response to how the systems of the human body are connected.

Total 100